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## Assessment of Preschool Education Component of ICDS Scheme in Jammu District

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# Assessment of Preschool Education Component of ICDS Scheme in Jammu District

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**Abstract** - Non formal Preschool education is an important component of Integrated Child Development Services scheme currently operational in more than 6506 projects in India. The present research paper is based on an investigation of this component in ICDS centres of Jammu district of Jammu and Kashmir state. A random sample of 60 Anganwadi centres (AWCs) was selected for this study. Using observation and interview schedule, the infrastructural facilities available and the conduct of preschool education activities were evaluated. The results indicate lack of adequate facilities in terms of space (both indoor and outdoor), quality of accommodation, drinking water and toilet facilities, furniture and fixtures and teaching learning material in AWCs. Preschool education activities were being planned and conducted by the AWWs on a routine basis but the activities were mostly repetitive and lacked novelty. Non availability of adequate infrastructure was found to be an active deterrent in conduct of activities. It is thus suggested that better infrastructural facilities be made available to bring about qualitative change in the ICDS programme.

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## 1. INTRODUCTION

Integrated Child Development Services (ICDS) scheme is the only flagship scheme in India at present that aims at providing services to preschool children in an integrated manner so as to ensure optimum growth and development. ICDS programme has covered many milestones since its inception in 1975, which has now reached to 13,56,027 centres nationwide (Consolidated Report of ICDS scheme state Government as on 13.12.2009). Over the last three decades, ICDS has demonstrated its effectiveness. Consequently the Govt of India has renewed its commitment to making the programme universally available in order to ensure full coverage for all Indian children and set "universalization of ICDS with quality" as a core objective in 11<sup>th</sup> five year plan (Eleventh five year plan, 2007 -2012). ICDS with its multisectoral approach provides its services under three broad headings which are nutrition, health and preschool education. Non - formal preschool education is a very crucial component of the package of services envisaged under ICDS scheme as it seeks to lay foundation for adequate physical, psychological, cognitive and social development of the child.

Good preschool education increases cognitive abilities, school achievements, improves classroom behaviour and decreases grade repetition among children (Barnett, 2004). Preschool education through ICDS focuses on the holistic development of the child. The objectives of preschool education under ICDS scheme ([www.wcdorissa.gov.in./download/final-2.0-f.pdf](http://www.wcdorissa.gov.in./download/final-2.0-f.pdf)) are as below:

- 1) To provide a stimulating environment for intellectual, linguistic, social emotional and physical development of child.
- 2) To prepare the child for primary grades.
- 3) To lay the foundation for the development of reading, writing and numeric skills.
- 4) To encourage interaction with environment and creative problem solving among children.
- 5) To stress on providing firsthand experience to children which would ensure development of skills related to the process of learning.
- 6) To promote self control and thereby discipline in children.

### a) Importance of Infrastructure:

The productivity of an organisation depends upon infrastructure and job performance of employees. Infrastructure is the basic physical and organised structure that facilitates the delivery of services and also improves the quality of a programme. The development and expansion of infrastructure is an essential prerequisite for the prosperity of any programme. It has been perceived that link between infrastructure and development is not a once for all effort. It is a continuous process and progress in development has to be preceded, accompanied and followed by development in infrastructure (National Institute of Public Cooperation and Child Development, 2006). A good building, outdoor and indoor space, adequate equipments, drinking water facilities and toilet facilities constitute the basic infrastructure of an Anganwadi centre (AWC) required for the effective delivery of services. Various surveys have been conducted by NCAER in 1992, 1996 and 2004 to assess the availability of infrastructure in ICDS centres. The rapid facility survey conducted by same organisation in 2004 found that only 46% AWCs were running in pucca buildings and around 10% were running in open air. More than 40% Anganwadi centres across the country are neither housed in ICDS buildings nor in rented buildings. According to the evaluation conducted by NIPCCD 2005-06 (cited in the report of All India Federation of AWW and helpers, 2009) about 49% of the

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Anganwadi had inadequate space for outdoor and indoor activities and 50% had no separate space for storage. It was further reported that 37% of AWC had no materials or aids for providing education. Fifty percent had no space either for storing material or for children to sit inside or play outside. There is a deficiency of teaching learning material in the AWCs. The teaching aids mostly used by Anganwadi worker (AWW) for providing preschool education (PSE) are charts which are given by Social Welfare Department (Arora et al., 2006). Lack or non-availability of teaching aids or preschool kits is a serious constraint for organising and conducting preschool sessions successfully (CAG, 2005 cited in a report of Institute for financial management and resources in 2009-10 on ICDS). The activities organised at AWCs are prayer, free conversation, teaching alphabets, recitation of poems and songs and motor skills such as running and jumping etc. AWWs instruct children in activities delivered to promote social, physical and intellectual growth needed for preschool children. But the quality of preschool services was found to be average due to the non-availability of teaching learning material (TLM). The indigenous materials made by the workers and helpers were used scarcely (Bhadwal 2009). Because of this scarcity, AWWs were having fears regarding loosing/spoiling the material and insufficient material also frequently led to quarrel amongst the children. The AWWs opt to keep TLM securely in a cupboard or out of the reach of children (Message, n.d.).

The above review of literature indicates the lack of availability and use of adequate infrastructural facilities in ICDS centres for meeting the objectives of preschool education component of the programme. These studies have drawn from surveys conducted in different states of India. The review pointed to the dearth of available data on this aspect in the northern most state of India, Jammu and Kashmir. There is a need to undertake evaluation studies in this area which give insight into assessing the effectiveness of the programme, so as to suggest improvement in the delivery of the services.

The present study was undertaken with the following specific objectives:

- 1) Assess the infrastructural facilities available at sample AWCs for preschool education activities.
- 2) Evaluate the conduct of preschool education activities in selected AWCs.

#### b) Context of the study :

The present research has been conducted in Jammu and Kashmir (J&K) State of India. J&K is a state located in the northern part of India. It comprises three provinces i.e. Jammu, Kashmir and Ladakh. There were 140 ICDS projects with 28577 AWCs which were operational in all the provinces in the year 2009, as per data provided by NIPCCD in Consolidated Report, 2009. Jammu province consists of ten districts from which

Jammu district has been selected for the study. There are ten ICDS projects (Table. 1) in Jammu district from which four ICDS projects were selected purposively. Among them, two blocks were purely urban (Jammu and Gandhinagar) and rest two were rural (Kotbalwal and Satwari). The beneficiaries of ICDS Scheme belong to the low socio-economic strata. Both local and non local population were the beneficiaries in the ICDS centres covered.

## II. RESEARCH METHODOLOGY

The unit of study adopted for research was the AWC. The respondents for the study comprised AWWs from AWCs of four blocks of Jammu district of J&K state. The blocks from where sample was drawn were Jammu, Gandhinagar, Satwari and Kotbalwal.

*Table 1 :* Block wise distribution of AWCs in Jammu District

S.No.	ICDS Blocks	AWCs Operational	AWC selected (10% of AWC)*
1	Jammu	203	20
2	Gandhi Nagar	85	9
3	Satwari	109	11
4	Khour	196	20
5	Bishnah	187	18
6	Akhnoor	172	17
7	Kot Balwal	193	19
8	Marh	177	18
9	R.S. Pura	296	30
10	Dansal	143	14

(\* rounded off nearest decimal place)

Source : Social Welfare Department J&K state, 2008

A list of AWCs was obtained from social welfare Department, Government of J&K state. Out of total, 60 AWCs were selected by taking 10% of the total operational AWCs of each block. For selecting sample random sampling (lottery method) technique was applied.

#### a) Research tools :

An observation schedule devised by NIPCCD was used for assessing the infrastructural facilities including space, building structure, sanitation facilities and physical assets available. Non-participant observations were conducted in the AWC for a period of 2 hours for 70 days to assess the procedure of imparting preschool education in the AWWs. A self devised interview schedule was used to collect information related to the type of activities executed by for overall development of preschoolers, utilization of TLM while executing activities and mode of teaching used in AWCs. The schedule was administered on AWWs of selected centres.

#### b) Procedure of data collection :

Before the finalization of tools, pretesting of the tools was done on 10 AWCs to assess the reliability and validity of tools. The data was collected by visiting the

AWC. Initially, rapport was established with the Anganwadi workers. The average time taken for data collection in one Anganwadi centre was about 3 hours. The data was collected between February- June, 2010.

### III. RESULTS AND DISCUSSION

The results of the present research have been organised under three major categories: Infrastructural facilities available, Types of activities conducted and Mode of conduct.

Table 2 : Profile of sample Anganwadi workers.

Categories	N=60	%
<b>a) Age of AWWs</b>		
21-30yrs	6	10.00
31-40yrs	23	38.33
41-50yrs	21	35.00
51-60yrs	10	16.66
<b>b) Qualification of AWWs</b>		
Matric	28	46.66
Higher secondary	16	26.66
Graduate	12	20.00
Post graduate	4	6.66
<b>c) Training status of AWWs</b>		
Trained	50	83.33
Untrained	10	16.66

In the present study, out of total 60 AWWs included as respondents, 73.33% were in the age group of 31 to 50 years. Regarding their educational status most of the Anganwadi worker were Matric and 26.66% were graduates and above. Majority( 83.33%) of AWWs got their orientation training at the time of recruitment and rest were untrained. The untrained respondents reported having been attached with some trained already functioning AWWs to learn the mechanism of functioning of AWCs.

Table 3 : Physical surroundings of AWCs

Categories	N=60	%
<b>Surrounding</b>		
Uncovered drains	12	20.00
Heaps of garbage	7	11.66
Cattle shed/Animal shelter	-	-
Slush and stagnant water	10	16.66
<b>AWC's Setup</b>		
Clean	60	100
orderly	20	33.33
Attractive	12	20.00

The ecological surroundings play an important role in development of children. There is a direct link between health and learning as is also reflected in a popular saying that healthy mind lives in healthy body. In AWC children spend 3 hours of a day for informal learning. AWCs therefore should be clean and stimulating in order to promote the learning abilities. Observation related to surrounding and setup of sample AWCs (Table. 3) revealed that 20% of sampled Anganwadis centres were surrounded with uncovered drains and stagnant water which stunk badly. As far as internal setup was concerned, all AWCs were broomed and mopped regularly. Only 33.33% AWCs had

arranged all equipment like utensils, food items orderly so as to use maximum indoor space available for conducting preschool activities. 20% AWCs were properly whitewashed and all teaching learning aids including charts, poster and indigenous toys were displayed.

Table 4 : Amenities at Anganwadi Centres

Categories	N=60	%
<b>a) Building structure</b>		
Old & dilapidated	-	-
Fairly functional	39	65.00
New & good	21	35.00
<b>b) Toilet facilities</b>		
Not available	39	65.00
Not satisfactory	15	25.00
Usable & satisfactory	6	10.00
<b>c) Indoor space available</b>		
Non existent	15	25.00
Inadequate	45	75.00
Adequate	-	-
<b>d) Outdoor space available</b>		
Non existent	39	65.00
Inadequate	19	31.66
Adequate	2	3.33

Anganwadi centre is the focal point under ICDS scheme from where different services as envisaged in the programme flow to the beneficiaries. To facilitate optimal utilization of the services, AWCs should be provided with necessary infrastructure. The present study found that most (65%) of the AWCs had fairly functional buildings with only one room facility with no provision of ventilation and lighting. Availability of toilets in sampled AWCs (65%) was also deficient. There were no separate cooking and storage facilities. All activities were carried out in same room which appeared to lead to inadequacy of indoor space for carrying out PSE activities. Similar findings were obtained in the study conducted by Qadiri and Manhas (2009) in Srinagar district of J&K state. It was also pointed out that 65% of AWCs had no outdoor space for performing PSE activities. These findings are also supported by the evaluative study conducted in 2009 in J&K by population Research Centre, University of Kashmir.

Table 5 : Physical Assets present in Anganwadi centres

Assets (as per NIPCCD inventory)	Availability		Sufficient		Utilization	
	N=60	%	N=60	%	N=60	%
Durries	38	63.33	10	6.00	38	63.33
Chairs & tables for staff	58	96.66	58	96.66	58	96.66
Blackboard	31	51.66	16	26.66	6	10
Charts	60	100	100	100	-	-
Blocks/counting frames	-	-	-	-	60	100
Picture books	-	-	-	-	-	-
Preschool kits	-	-	-	-	-	-
Toilet accessories	-	-	-	-	-	-
First aid box	-	-	-	-	-	-
Toys	-	-	-	-	-	-
Teaching aids made by AWW & helper	57	95	-	-	40	66.66

Table 7 : Activities conducted in AWCs

Activity	Number of AWCs conducting activities (out of 60)	%
Painting/drawing	25	41.66
Group/free discussion	60	100
Indoor activities	60	100
Outdoor activities	21	35
Story telling/poems	60	100
Paper activities	15	25
Role play	20	33.33
Puppets	-	-
Block building	-	-
Field trip/ nature walk	30	50
Science activities	5	8.33
Water activities	17	28.33
Any other	52	86.66

The above table reveals the activities being conducted in AWCs for performing PSE activities. It was observed that free group discussion, indoor activities like storytelling, reciting poems and songs were conducted daily by all the sampled AWCs which enhanced the language and learning skills of children. For enhancing physical development of children, AWW engaged children in doing activities like jumping, yoga, poems with actions only due to the unavailability of adequate space and basic facilities. Similar findings had been found in a survey (2006) that unavailability of accommodation and TLM inhibit the AWW to indulge the children in various PSE activities. Out of the total, only 35% AWWs conduct outdoor activities like running, free play, throwing ball etc. by utilizing the space which was available. For introducing children to the environment and surroundings, 50% of AWW took children to nearby park or temple. The other activities conducted in AWC for PSE were writing alphabets, numbers, colours names etc. Children brought their own books, copies and pencils for performing these activities.

#### IV. CONCLUSION

Anganwadi centre is the focal point for delivery of ICDS services, one of the largest programmes in India for welfare of children. There is a direct relationship between the availability of infrastructure in the AWCs and the quality of services provided. The results of the present study have revealed inadequate infrastructure and teaching learning material in the sampled AWCs and it was found that this acted as a deterrent for conduct of preschool education activities. Similar results have been reported by many researchers across the country (Anuradha and Kamala,2003; Sinha,2008; Qaidri and Manhas,2009; Population Research Centre,2009; Vijayanti,2010; Dixit et al, 2010; and Bashir,2011). The comparative data has been presented in Table.8.

For efficient and effective functioning, the AWC needs a minimum level of basic infrastructure and equipments number, adequacy and utilization. Majority (63.3%) of the AWCs had provision of durries and utilized it for children, but the texture of durries was rough which made children uncomfortable. For AWW, only one chair and table was provided. It was also seen that there was non availability of counting frames, picture books, toilet accessories, preschool kits, first aid box and toys. For imparting PSE, different charts including alphabets, numbers, birds, animals etc. were provided but not utilized by the AWW as it was not hanged according to the eye level of children. Moreover, the text on charts was small and difficult for children to read and they were also not allowed to touch and explore the charts themselves.

Due to the insufficient availability of teaching aids, AWWs and helpers prepare TLM themselves by using indigenous material. The aids made by them were clay toys, stuffed toys like vegetables, fruits birds etc. but it was not utilized by the worker as the material was limited according to the number of children.

Table 6 : Methodology used for conducting preschool activities

Categories	N=60	%
<b>a) Language used</b>		
Local	-	-
Hindi	60	100
Any other	-	-
<b>b) Teaching mode</b>		
Formal	-	-
Non formal	60	100
<b>c) Time duration</b>		
Upto 1 hour	7	11.66
1-2 hours	53	88.33
2-3 hours	-	-
<b>d) Planning of activities</b>		
Yes	60	100
No	-	-
Any other	-	-

All the AWCs had planned time schedule for conducting activities (Table 6) as per the instruction provided in the scheme document but lacked in execution mainly because of the non-availability of space and teaching aids. The teaching mode used by all the AWWs was non formal method by using play way approach and Hindi language as medium of instruction for preschool activities. Local language (Dogri) was not used and repetition of activities was observed in daily activity schedule. The duration of time for conducting PSE activities by majority (88.33%) of AWWs was between 1 to 2 hours.

Table 8 : Comparison between results of present and previous studies

Name, year and Place	Previous Studies	Present study
Somaiah and Vijaya-lakshmi, 2007 (Karnataka )	Preschool is the weakest component in the ICDS programme. The preschool activity which was to be conducted at least for two hours a day was rarely seen in the AWCs visited.	Duration of PSE activities found in majority (88.33%) of AWCs was 2 hours.
Population Research Centre, 2009 (Jammu and Kashmir state)	It was found that quality of space and location was compromised. It was also observed that 28% percent of AWCs were housed in Pucca buildings, 45% in semi Pucca houses and rest in Katcha houses. No separate storage space, Kitchen and space for indoor and outdoor activities, hence compromising the scope of growth for children.	The findings revealed that there was no separate space for storage, kitchen etc. Each and every activity of AWCs were conducted in single room.
Qadri and Manhas, 2009 (Srinagar, J&K)	The findings indicate that AWCs were housed in rented buildings with one room facility. Most of the AWCs were without toilets. PSE imparted in AWCs was inadequate	Present findings were also similar as it also reveals that all AWCs were housed in rented building and PSE component of ICDS was dull and not challenging due to the inadequacy of TLM and space.
Dixit. et al, 2010 (Madhya Pradesh)	The AWCs had problems of inadequate space, lack of cooking facilities, toilets and majority of them operated from rented buildings. There was a shortage of PSE kits and PSE activities were not given much importance under the scheme.	Present study revealed also similar problems as lack of basic facilities hinder the quality of preschool education component.
Kumar and Pal, 2010 (Uttarakhand)	Lack of appropriate sanitary facilities revealed. It was found that 23.35 selected AWCs were having toilets and 76.06% of AWCs were without toilets.	Similar results were found 65% AWCs were deficient in toilet facilities.
Bashir, 2011 (Srinagar, J&K)	There is no space for the children to play. Most of the children registered with the centre don't come regularly due to absence of basic facilities.	Similar findings were found in the present study. Only 3% AWCs had adequate outdoor space for playing.

The result of the previous as well as the present study indicate that AWCs are lacking in basic facilities like infrastructure, space etc. which acted as a deterrent for the conduct of preschool education component of ICDS. The major facilities which were found of be lacking were:

1. Indoor and outdoor space for conduct of preschool activities.
2. Toilet facility.
3. Teaching learning material.

In the current five year plan, allocation of resources under ICDS has been increased substantially to not just expand coverage but to ensure availability of adequate infrastructure. For the proper functioning of an ICDS centre, it should be housed in a building with a kitchen, have baby friendly toilet, drinking water facilities and with adequate space for children to play (Eleventh five year plan, 2007-2012). In view of this recommendation, it can be stated that the Anganwadi centres studied in Jammu district grossly lacked in the above mentioned facilities. Jammu and Kashmir State is one of the special states in India since it is covered under Article 370 of the constitution and has its own set of provisions for governance. In view of this and also keeping in mind the fact that state has been affected by armed conflict since over two decades, the present

results based on study of conditions in a local setting suggest that drastic measures need to be put in place to bring about wholesome changes in the provision of basic infrastructural facilities for the ICDS programme. In addition to that, J&K state is one of the states that has seen downfall in sex ratio trends in the recent census survey (From 914 in 2001 to 859 in 2011) which is a cause for great national concern. ICDS programme can play a major role in reversing this trend provided the programme gets adequate attention and better infrastructural facilities.

## REFERENCES REFERENCES REFERENCIAS

1. All India federation of AWW and Helper,(2009). Measures to make ICDS more effective. (Online) available at <http://www.aifawh.org/detail.php?id=22> [ Accessed 20 April 2011].
2. Anuradha, K.N. and Komala, M.(2003). Influence of infrastructural facilities in anganwadis on promoting the allround development of preschool children. *Journal of Human Ecology*,14(4): 287-289.
3. Arora, S., Bharti S, and Mahajan A.(2006). Evaluation of non formal educational services provided at Anganwadi centre (urban slums of Jammu city). *Journal of Social Sciences*, 12(2): 135-137.

4. Barnett.S,(2004).*The values of effective preschool education*. New York: National Institute of Early Education Research. Bashir, A. (2011). No Child's Play. *Kashmir Life*. 2(47).
5. Bhadwal, S. (2009). An Evaluation of Services Provided in ICDS Centres of Samba Districts. Unpublished M.Sc. dissertation, P.G. Department of Home Science, University of Jammu.
6. Consolidated Report of ICDS scheme by State Government as on 31.12.2009. (online) available at <http://www.wcd.nic.in/icdsimg/sonoperAwcsbenf311209.pdf> [Accessed 18 November2010].
7. Dixit, S., Sakalle, S., Patel, G.S., Taneja, G., and Chourasiya, S. (2010). Evaluation of functioning of ICDS project areas under Indore and Ujjain divisions of the state of Madhya Pradesh. *Online Journal of Health and Allied Sciences*. 9(1):2.
8. Eleventh five year plan (2007-2012). Social Sector, volume II. Planning Commission, Government of India. (Online) Available at <http://www.planningcommission.nic.in./plans.vol2.pdf> (Accessed 20 February 2009).
9. Focus on children under six (2006). Abridged report. (Online) Available at <http://www.righttofoodindia.org/data/rtfobfocusrepotabridged.pdf> [Accessed 21 November 2010].
10. Institute for financial management and resources (2009-10). Integrated Child Development Services. [Online] available at <http://www.cdf.ifmr.ac.in/wp.context> [Accessed 20 April 2011].
11. Kumar, A. and Pal, S.(2010). A study of sanitation of toilets in Anganwadi centres located in rural areas of Uttrakhand state in India. *Global Journal of Human and Social Sciences*.10(6): 67.
12. Message, (n.d.). Department of Women and Child Development, Ministry of Human Resource Development Govt. Of India. (online) available at [Zunia.org/uploads/media/knowledge/strengthen\\_presch\\_edu.pdf](http://Zunia.org/uploads/media/knowledge/strengthen_presch_edu.pdf). [Accessed 30 March 2011]
13. National Institute of Public Cooperation and Child Development (2006). *Three Decades of ICDS, An Appraisal*. New Delhi.
14. Population Research Centre (2009). Evaluation report on Integrated Child Development Scheme (ICDS) in Jammu and Kashmir. Department of Economics, University of Kashmir.
15. Qadiri, F. and Manhas, S(2009). Nature of preschool education imparted at Anganwadi centres. *Shodh, Samiksha and Mulyankan (International Journal)*. 2(7).
15. Report (2009). Consolidated Report of ICDS Scheme by State Government as on 31.12.2009. (online) available at <http://www.wcd.nic.in/icdsimg/sonoperAwcsbenf311209.pdf> [Accessed 18 November 2010].
16. Sinha, D. (2008). Child Malnutrition and ICDS. *Yojana*, July, 54-57.
17. Somaioh, M. and Vijayalakshmi, V.(2007). Management Perspective of ICDS programme. *Dharama Bhavan's Business Journal*. 1(1).
18. [www.wcdorissa.gov.in./download/final-2.0-f.pdf](http://www.wcdorissa.gov.in./download/final-2.0-f.pdf) [Accessed 30 March 2011].